

Notice of Allowability

Application No.

10/689,490

Examiner

Katherine W. Mitchell

Applicant(s)

FLY, DAVID E.

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/3/2005.
2. ☒ The allowed claim(s) is/are 1-10, 15 and 25-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20051012.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Robert Harter on Oct 12, 2005.

3. The application has been amended as follows:

In the Claims: The following claims have been amended:

In claim 5, line 1, "is movable" has been changed back to --moves--.

In claim 5, line 2, "is movable" has been changed back to --moves--.

In the Claims: The following claims have been added:

25. The fastener of claim 10, wherein the shape include a throat between the narrower end and the wider end, wherein the throat is narrower than the narrower end and the wider end.

26. The fastener of claim 1, wherein the radially expandable sleeve defines a slit that traverses the sleeve's longitudinal centerline and is interposed between two axially offset portions of the radially expandable sleeve, wherein the two axially offset portions are able to radially expand independently of each other.

27. The fastener of claim 1, further comprising a plurality of irregularities distributed circumferentially around the cam head, wherein the plurality of irregularities help hold the shaft in the clamp position.

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28. The fastener of claim 1, further comprising a lock pin that is axially movable relative to at least one of the clamp head and the cam head, wherein the lock pin is movable between a lock position where the lock pin helps hold the shaft in the clamp position and an unlock position where the lock pin allows the shaft to move to the release position.

29. A method of clamping the fastener of claim 1 to a member, wherein the member defines a hole having an inner diameter, wherein the hole extends from a first surface of the member to a second surface of the member, the method comprising:

inserting the fastener into the hole so that the fastener engages the first surface, the second surface, and the inner diameter of the hole;

expanding the fastener radially outward against the inner diameter; and

while expanding the fastener, simultaneously urging the first surface toward the second surface, wherein the step of expanding and simultaneously urging are achieved by rotating a portion of the fastener within the radially expandable sleeve that defines an oblong opening, in a radial cross-sectional cut, having an oblong shape when the radially expandable sleeve is unexpanded.

30. The method of claim 29, wherein the sleeve defines a slit that extends a full length of the sleeve.

4. The following is an examiner's **statement of reasons for allowance**:

Drotar is the closest art, and although Fig 3 appears to show an oblong opening in a radially expandable sleeve with a shaft radially movable in the opening between release and clamp positions, Drotar is clear that the opening has a round (cylindrical) cross section at a radial cut when the sleeve is unexpanded.

Applicant has provided sound basis for the advantage to the oblong shaped opening, with the cam's longitudinal centerline radially offset to the shaft's longitudinal centerline and the sleeve's longitudinal centerline radially offset to the shaft's longitudinal centerline when the shaft is in the release position, such that the outer diameter of the radially expandable sleeve increases in response to the shaft moving radially from the release position to the clamp position in the oblong hole. Examiner can find no motivation other than hindsight for piecing these features together to arrive at the claimed invention.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

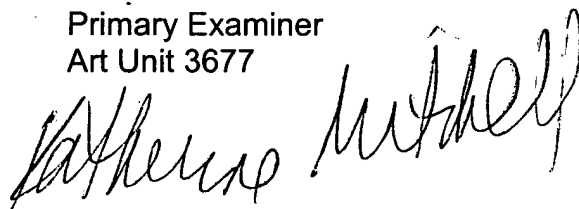
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell
Primary Examiner
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A handwritten signature in black ink, appearing to read 'Katherine W Mitchell', is written over the printed name and title.

Kwm
10/12/2005